Hybrid Ideals in Near-subtraction Semigroups

S. Meenakshi^{1*}, G. Muhiuddin², B. Elavarasan¹, D. Al-Kadi³

¹Department of Mathematics, Karunya Institute of Technology and Sciences, Coimbatore-641114, Tamil Nādu, India

ABSTRACT

The fuzzy set is highly beneficial for expressing people's hesitations in their everyday lives, and it is a great tool for dealing with uncertainty, which can be described precisely and perfectly from the decision- maker's point of view. Soft set theory has been developed in recent years to address real-world issues. Jun et al. merged the fuzzy and soft sets to produce hybrid structures. Hybrid structures are soft set and fuzzy set speculations. The concept of hybrid ideals in near-subtraction semigroups is introduced in this paper, and their equivalent results are obtained. Additionally, we demonstrate the concept of hybrid intersection. Moreover, we define the concept of homomorphism of a hybrid structure in a near-subtraction semigroup.

Keywords: Semigroup; ideals; subtraction semigroup; hybrid structure; hybrid ideals; hybrid intersection.



© 2022 Copyright held by the author(s). Published by AIJR Publisher in "Book of Abstracts of the 2nd International Conference on Applied Mathematics and Computational Sciences (ICAMCS-2022), 12–14 October 2022. Organized by the DIT University, Uttarakhand, India.

DOI: 10.21467/abstracts.138 ISBN: 978-81-957605-2-7 (eBook)

²Department of Mathematics, University of Tabuk, P.O. Box-741, Tabuk-71491, Saudi Arabia

³Department of Mathematics and Statistics, College of Science, Taif University, P.O. Box-11099, Taif-21944, Saudi Arabia

^{*}Corresponding Author